

Eco ADVENTURE TOURS Newsletter



Great Spring Adventures

Come Discover the “WILD” Side of Miami

South Florida welcomes the spring season with noticeably milder and longer days, the vibrant display of new growth on Live Oak trees and the bursting of colorful wildflowers across the Everglades landscape. The great mystery of spring bird migration is on its way with the first arrival in March of tiny Northern Parula Warblers singing and feeding on a menu of insects in the forest canopy, while Purple Martins are observed soaring high over parks and farmlands scouting for potential nesting sites. In late spring look for the arrival of tropical bird species such as Swallow-tailed kites gliding over pinelands and hardwood hammocks, joined by resident White-crowned pigeons and Mangrove cuckoos. This is a great time of the year to visit your Miami-Dade Parks and participate in an EcoAdventure. We have a great line up of some of your favorite canoe, kayak, and bike trips and new adventures tours into the Everglades, Big Cypress Swamp, and the Florida Keys. Once again Naturalist/author Roger Hammer will be offering educational talks and excursions to showcase the spring wealth of Everglade's wildflowers. Whether it's on a walk, bicycle trip, or simply enjoying a slide presentation, you will find the Everglades wildflowers

to be some of the most interesting and enchanting flowers in the world. And there is no other activity that exposes you to the sights and sounds of nature quite like bird watching. More than 470 verified bird species occur in Florida and some of these will be featured on our new Everglades Birding Tours. This is a great trip for beginners who want to have fun learning and observing many of the beautiful wading birds that inhabit the fresh water marshes. Also be sure to check out the schedule for the guided Owl Walks that will be conducted in Bill Sadowski, Castellow Hammock, and Greynolds Parks. These walks will provide you with a great opportunity to observe Screech owls and other nocturnal wildlife that inhabit these sites. If you always wanted to try a challenging kayak trip, check out our new six-mile Coconut Grove and Historic Miami Kayak trip along the bay front of Biscayne Bay to Matheson Hammock Park. Learn about the history and natural history of the bay while perfecting the basic skills of kayaking with expert guides. Whatever activities you choose, you can count on Miami-Dade Parks to provide you with the best in eco-adventure trips and programs. We guarantee it will be fun and an adventure!



BIKE TRIPS

ABOUT OUR BIKE TOURS:

Its spring in South Florida! Temperature and humidity create a “spring fever” state of mind and lots of energy to go biking! To help you on that front we have a variety of bike trips where you can exert some of that energy into peddling on wilderness trails looking for wildflowers, or observing spring migratory birds in the Everglades, discovering the rich history of Key Biscayne, or exploring historic country roads of the Redland Farming District. Fee includes all biking equipment. For all bike trips unless otherwise stated, bring a snack, water, sunscreen, insect repellent, long-sleeved shirt, and a wide-brimmed hat for protection against the sun. Sign up now for one of the following naturalist guided trips. Customized tours can be arranged for groups of six or more by calling the Eco-tourism Office at (305) 365-3018.

KEY BISCAZYNE HERITAGE BIKE TOUR

Saturday, May 17 & 31, 2003

Sunday, May 11, 2003

Time: 8:00A.M. – 11:00A.M

Saturday, April 12 & 19, 2003

Sunday, April 6, 2003

Time: 10:00A.M. – 1:00P.M

Wednesday, April 2, 2003

Thursday, April 24, 2003

Time: 1:00P.M. – 4:00P.M.

Friday, May 2, 2003

Saturday, May 24, 2003

Time: 4:00P.M. – 7:00P.M.

Rated: Moderate – (12-mile round trip)

Fee: \$20.00/Person - Includes bike and helmet rental

\$15.00/Person - Bring your own bike

Participants must be 9 years of age and older (An adult must accompany persons under 18 years)

Explore the natural history of Key Biscayne as you bike along the streets and paths of this barrier island. Learn about the natural and historical events which created the Key Biscayne of today. Special group tours are available for dates that are not listed. All children under 17 years must wear a helmet by state law. **Reservations: (305) 365-3018. Meet at Crandon Visitors' and Nature Center.**

REDLAND HISTORIC BIKE TOUR

Saturday, March 29, 2003

Time: 9:00A.M. - Noon

Fee: \$20.00/Person - Includes bike, helmet rental, and bottled water.

\$15.00/Person - Ride your own bike.

Rated: Moderate (14-miles round trip)

Join naturalist Roger Hammer on this leisurely-paced, 14 mile bike hike through the Redland with a stopover at Redland Fruit & Spice Park. You will learn about James Castellow, Hainlin's saw mill, Anderson's Corner, Redland Farmlife School, the Bauer Family, and more. Water provided. **Call (305) 242-7688 for more information and reservations. Meet at Castellow Hammock Park.**

EVERGLADES WILDFLOWER BIKE TOUR

Saturday, May 17, 2003

Time: 8:30A.M. - 1:00P.M.

Fee: \$20.00/Person - Includes bike, helmet rental, and bottled water.

\$15.00/Person - Ride your own bike.

\$10.00/Vehicle - Entrance fee to Everglades National Park

Rated: Moderate (12 mile trip)

Join naturalist Roger Hammer on this leisurely-paced, fun and educational 12-mile bike hike on Long Pine Key in Everglades National Park. We will stop periodically along the trail to observe and learn about the wild flowers found in this unique region. Bring a light lunch to eat at the halfway point next to scenic Pine Glade Lake. Water provided. **Meet at the Ernest F. Coe Visitor Center in Everglades National Park. Pre-registration is required: Call (305) 242-7688.**

Nature Walks

ARCH CREEK PARK AND NATURE CENTER

1855 N.E. 135 Street

North Miami, Florida

Phone: (305) 944-6111

NATURE WALK

Saturday, April 5, 19, & May 3, 17, 2003

Time: 12:30P.M. - 2:00P.M.

Fee: Free

Walk in the footsteps of the extinct Tequesta Indians as you stroll through this historical and tropical hardwood hammock. Learn about the different plants, their uses and how they fit into this ecosystem. **For special group tours call: (305) 944-6111. Meet at the Nature Center/Museum.**

BILL SADOWSKI PARK AND NATURE CENTER

17555 S.W. 79th Avenue

Miami, Florida

Phone: (305)255-4767

WEEKEND NATURE WALKS & TALKS

Saturdays & Sundays

Time: 3:00P.M. – 4:00P.M.

Fee: \$2.00/Person

Join a park naturalist every Saturday and Sunday for a variety of natural history topics on the nature trails ranging from native plants, snakes, turtles, to recycling. **Reservations: (305) 255-4767. Meet at the Nature Center.**

GREYNOLDS PARK

17530 W. Dixie Highway

North Miami Beach, Florida

Phone (305) 945-3425

NATURE WALKS

Saturdays

Time: 1:00P.M. – 3:00P.M.

Fee: \$3.00/Person plus \$4.00 entrance parking fee

On this naturalist guided walk of the nature trails in Greynolds Park you will seek animals in their natural surroundings as well the plant life that abounds in Miami-Dade County's first county park. Meet at the Boathouse. **For Group Reservations: (305) 948-2891.**

DEERING ESTATE AT CUTLER

16701 S.W. 72nd Avenue

Miami, Florida

Phone: (305) 235-1668

DEERING ESTATE HISTORIC TOURS

Daily – Call for schedule – (305) 235-1668

Fee: \$6.00/Adult, \$4.00/Child (Includes Admission to the Estate and historic home tours)

See some of South Florida's earliest buildings. The Richmond

Cottage was built between 1896 and 1916, is one of the finest remaining examples of South Florida's vernacular architecture and the Stone House, built in 1922 is a unique example of Florida's Mediterranean Revival style architecture. **Meet naturalist at the Visitor's Center.**

DEERING ESTATE NATURAL AREAS TOURS

Daily – Call for schedule – (305) 235-1668

Fee: \$6.00/Adult, \$4.00/Child (Includes admission to the Estate and historic home tours)

This is a one hour guided walking tour through tropical hardwood hammock to a Tequesta burial mound. Bring along a pair of binoculars, drinking water and insect repellent. **Meet naturalist at the Visitor's Center.**

BUTTERFLY WALK

Call for Schedule of Dates and Times: (305) 235-1668

Fee: \$6.00/Adult, \$4.00/Child (Includes Admission to the Estate and historic homes)

Observe the many colorful butterflies that fill the 450-acre bayside preserve, including Monarchs, Hairstreaks, Queens, Sulphurs and Swallowtails. Bring along a pair of binoculars and drinking water. This walk lasts approximately 2 1/2 hours. Apply your insect repellent before the walk. **Meet naturalist at the Visitor's Center.**

MIAMI METROZOO

12400 S.W. 152 Street (Coral Reef Drive)

Miami, Florida

Phone: (305) 251-0400

SPECIAL EARTH DAY WEEK PROGRAMS

April 21 - April 25, 2003

The Guided Pine Rockland Walk and other special educational programs are planned during Earth Day Week. Walks, Talks and Plant Games explore the fascinating landscape of this rare native pine rockland habitat. Learn about its geology, fire dependency, and historic plants. Comfortable sturdy shoes are recommended for walking on uneven terrain as well as a hat and sunscreen. Smoking is not permitted. Participants must be 10 years and older.

Guided Pine Rockland Walk Daily Schedule this week only.

Fee: Included in Zoo Admission - \$8.95+Tax/Person

Call Education Department for more Pineland Walk Information and Earth Day Week Program Schedule: (305) 255-5551.

For general Zoo information: (305) 251-0400.

CRANDON PARK VISITORS' AND NATURE CENTER

6767 Crandon Boulevard

Key Biscayne, Florida

Phone (305) 361-6767, Ext. 112

Enter through North Beach Entrance

Parking Fee: \$4.00/Vehicle

PUBLIC NATURE WALKS

Naturalist guided hammock nature walks are conducted every Saturday and Sunday at 10:00A.M. & 2:00P.M. Walks are FREE. **Meet at the Crandon Park Visitors' and Nature Center. For additional information call: (305) 361-6767, Ext. 112.**



INDICATES BAYNANZA-RELATED ACTIVITY

Meet a Native

YOUR INTRODUCTION TO SOUTH FLORIDA NATIVE PLANTS

Muhly...That “Other” Everglades Grass

(*Muhlenbergia capillaris*)

by Roger L. Hammer

When most people think of the Everglades, they envision seemingly endless stretches of saw-grass, *Cladium jamaicense*. The Indians called the Everglades Pa-hay-Okee or “grassy waters”, and the grand dame of the Everglades, Marjory Stoneman Douglas called this place a “River of Grass”. Ironically, saw-grass is not a grass at all, but is a member of the *Cyperaceae*, or Sedge Family.

There is, however, a true grass in the Everglades that most people have never heard of, yet it is often the dominant plant species in some Everglades prairies. This grass makes itself known when it flowers each fall. Great waves of mauve or purple flowers sway in the slightest breeze across the Everglades when this grass blooms, adding a splash of color to this otherwise drab habitat.

This grass is commonly called muhly, or hair grass, *Muhlenbergia capillaris* (synonym *M. filipes*). This is the only species of *Muhlenbergia* that occurs in the Everglades National Park and the Big Cypress National Preserve, although two other

species, *M. expansa* and *m. schreberi* occur in northern Florida. About 100 species occur worldwide from the United States through Mexico and into South America, and also in India and Japan. Many species in the western U.S. are important range grasses, forming a considerable portion of the grass flora of the arid prairies. It was in the western states where it was dubbed “muhly” by forest rangers. Our native species is a clumping grass with long, slender, flat leaf blades that spread by underground rhizomes. To prove how common this grass is, many Everglades prairies, especially the transverse glades, or the so-called “finger glades” of Long Pine Key are referred to as “*Muhlenbergia prairies*.” Although muhly is the dominant plant in some prairies, sawgrass is a constant associate, along with about 20 other grass and sedge species that make up these watery meadows.

Muhly grass was named in honor of Gotthilf Heinrich Ernst Muhlenberg (1753-1815), a pastor of a Lutheran Church in Lancaster, Pennsylvania. During the American Revolution, he

was forced to flee into the countryside where he spent his time studying and classifying the local native plants. He collected and identified over 1,000 species of plants and sent his writings to the American Philosophical Society for publication. He then began an extensive work on the North American flora but, before his death in 1815, he had only finished the section on grasses. His work was later admired by two other significant botanists, John Torrey and Asa Gray, who were very young when he died, but followed in his footsteps. Several other plants were named to honor Muhlenberg, which include the chinquapin oak, *Quercus muhlenbergii*, and a sedge, *Carex muhlenbergii*. He is most remembered, however, by the grass genus *Muhlenbergia*.

The next time you visit the Everglades and look out across the River of Grass, remember Gotthilf Muhlenberg and the plant that bears his name.

Canoe Trips

ABOUT OUR CANOE TRIPS:

We are really excited about our spring line up of EcoAdventure canoeing in the urban and wilderness parks. Our naturalist’s aquatic team has put together a series of tours that offer professionally led outdoor adventures, the best gear, great park locations, and lots of creative touches. Be sure to check out the rating for each trip. Most are easy to moderate. For all canoe trips, unless otherwise stated, bring snacks, water (1 quart minimum), sunscreen, insect repellent, long-sleeved shirt, and a wide-brimmed hat. It is suggested that you place important belongings in a sealable plastic bag or

waterproof container. Fee includes all canoeing equipment. Don’t forget your binoculars for viewing spring birds and other wildlife. Participants 18 years of age and younger (pending program site), are welcome after completing a Release of Liability form by a parent or legal guardian. County regulations require life vests to be worn at all times by all participants. *Customized tours and transportation can be arranged for groups of six or more by calling the Eco-tourism Office at (305) 365-3018 or (305) 365-3019.*

CORAL GABLES WATERWAY

Sunday, March 30, & May 11, 2003

Saturday, May 3 & 17, 2003

Time: 9:00A.M. - 12:00P.M.

Fee: \$20.00/Person

Rated: Easy to Moderate

Relive Miami’s early history and observe wading birds on this quiet canoe trip on the historic Coral Gables Waterway to the Biltmore Hotel. **Reservations: (305) 662-4124. Meet at A.D. Barnes Park Nature Center.**

MATHESON TO THE CORAL GABLES WATERWAY

Saturday, April 19, & May 31, 2003

Time: 9:00A.M. - 3:00P.M.

Fee: \$30.00/Person

Rated: Moderate to Strenuous

This relaxing trip offers a great view of Biscayne Bay and its diverse wildlife as you explore the bay’s mangrove-lined shoreline and enter the Coral Gables Waterway. **Reservations: (305) 662-4124. Meet at A.D. Barnes Park Nature Center.**

BISCAYNE BAY CANOE TRIPS

SUNRISE CANOE TRIP

Saturday, March 29, 2003

Sunday, May 4 & 18th, 2003

Time: 7:00A.M. - 9:00A.M.

Fee: \$20.00/Person

Rated: Easy to Moderate

SUNSET CANOE TRIP

Saturday, March 29, & May 24, 2003

Sunday, May 25, 2003

Time: 4:00P.M. - 6:00P.M.

Fee: \$20.00/Person

Rated: Easy to Moderate

The mood of Biscayne Bay changes from dawn to dusk with spectacular scenic views and wildlife. Experience these moments on one of our canoe trips at either sunrise or sunset! **Reservations: (305) 662-4124. All trips meet at Matheson Hammock Park.**

HISTORIC OLETA RIVER CANOE TRIP

Saturday, April 12, 17 & 26, May 10 & 24, 2003

Wednesday, April 17, & May 14, 2003

Time: 9:00A.M. - 1:00P.M.

Fee: \$20.00/Person

Rated: Moderate

Paddle along one of Florida’s most historic and beautiful rivers. Catch a view of many wading birds in their natural habitats and

visit an undisturbed Tequesta Indian midden. **Reservations: (305) 945-3425. Meet at Greynolds Park Boathouse.**

KEY BISCAYNE CANOE TRIPS

MORNING CANOE TRIPS:

Fridays, May 9 & 23, 2003

Sundays, April 6 & 13, 2003

Time: 8:00A.M. - 11:00A.M.

SUNSET CANOE TRIPS:

Saturday, March 29, 2003

Sunday, March 23 & 30, & April 5, 2003

Time: 3:00P.M. – 6:00P.M.

Wednesday, April 9 & 27, 2003

Friday, May 2 & 18, 2003

Saturday, May 3 & 18, 2003

Sunday, April 27, 2003

Time: 4:30P.M. – 7:30P.M.

Explore the mangrove-lined western shoreline of Key Biscayne, an extensive marine preserve for nurse sharks, wading birds, and colorful underwater marine life. Special Group Tours are available for dates not listed. **For Reservations: (305) 365-3018. Meet at the Crandon Park Marina.**

KEY BISCAYNE FULL MOON CANOE TRIPS:

Wednesday, April 30, 2003

Time: 4:30P.M. – 7:30P.M.

Wednesday, April 16, 2003

Time: 5:30P.M. – 8:30P.M.

Friday, May 16, 2003

Saturday, May 17, 2003

Time: 6:00P.M. – 9:00P.M.

Fee: \$ 20.00/Person

Rated: Easy to Moderate

Experience the romance of Biscayne Bay and enjoy the spectacular view of the Miami skyline by moonlight while exploring the mangrove-lined western shoreline of Key Biscayne, an extensive marine preserve for unique plants, wading birds and colorful marine life. Special group tours are available for dates not listed. **Reservations: (305) 365-3018. Meet at the Crandon Park Marina.**

DEERING ESTATE AT CUTLER

CHICKEN KEY CANOE TRIP

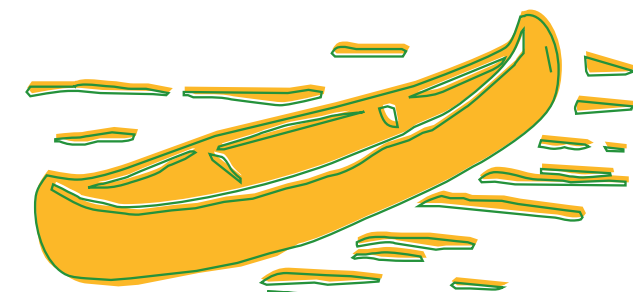
Weekly on Saturdays & Sundays

Time: 8:00A.M. - Noon

Fee: \$20.00/Person, \$15.00/Child (Includes general admission to the Estate)

Rated: Easy to Moderate

This canoe trip leaves from the estate’s boat basin to Chicken



Key, a seven acre mangrove island located one mile off-shore in Biscayne Bay. A rich variety of wading birds and marine life will be observed. **Reservations: (305) 235-1668. Meet at the Visitor’s Center.**

MOONLIGHT CANOE TRIP

Thursday, April 17, 2003

Time: 7:30P.M. - 10:30P.M.

Fee: \$35.00/Person (Includes general admission to the Estate)

Rated: Easy to Moderate

Enjoy the sights and sounds as you paddle on the moon-lit bay to Chicken Key. Upon reaching the key, relax by the bonfire and enjoy refreshments and snacks. **Reservations: (305) 235-1668. Meet at the Visitors’ Center.**

INDIAN KEY CANOE & SNORKEL ADVENTURE

Saturday, June 14, 2003

Time: 7:00A.M. - 7:00P.M.

Fee: \$30.00/Person

Rated: Moderate

Take a step back in time with a canoe and snorkel tour around the first seat of Dade County, where a luxury hotel and bowling alley once stood on this tiny island in the Florida Keys. We’ll explore the plant and animal life on the island and beneath the surrounding waters. **For more information and Reservations: (305) 365-3018.**

INTRODUCTION TO CANOEING WORKSHOPS

A.D. Barnes Park

Saturday, May 10, 2003

Time: 1:00P.M. - 4:00P.M.

Fee: \$20.00/Person

For all beginning canoeists, this workshop is conducted on Tropical Park Boating Lake. Learn the fundamentals of canoeing, including basic strokes, steering, and safety skills on this large freshwater lake. **Reservations: Call A.D. Barnes Park (305) 662-4124. Meet at Tropical Park Boating Lake, 7900 SW 40th Street.**

CRANDON PARK

A Canoe Workshop for groups is also available at Crandon Park upon request. This workshop is designed to offer participants instruction in the fundamentals of canoeing, including basic strokes, steering and safety skills on open ocean waters. A minimum of 6 participants is necessary. **Call (305) 365-3018 for more information to schedule your group.**

BILL SADOWSKI PARK AND NATURE CENTER

Saturdays, April 26 & May 31, 2003

Time: 3:30P.M. - 6:30P.M.

Fees: \$20.00/Adult, \$10.00/Child (under 18 years), an adult must accompany children under 18.

Join us at the park for the fundamentals of canoeing, including basic strokes, steering, and safety skills. We will be canoeing on the C-100 canal behind the park. Please come prepared with a change of clothes, water shoes, sun protection, drinks, and lunch. **Call (305) 255-4767 for more information and reservations.**



KAYAKING AND SNORKELING ADVENTURES

ABOUT OUR KAYAK TRIPS:

There is simply no better way to experience the beauty of Biscayne Bay and the coastal waters of the Atlantic Ocean than from the seat of an ocean kayak. Explore these biologically rich waters with our skilled naturalist guides and experience marine life up close and personal. On these trips it is common to have Bottled-nose Dolphin swim right up to your boat, or to see Nurse Sharks and Spotted Eagle Rays cruising over dense sea grass beds below you. These trips are designed and rated for a wide range of kayaking abilities. Fee includes all kayaking equipment. Snorkeling equipment can be rented at an additional \$5.00 fee. For all kayak trips, unless otherwise stated, bring snacks, water (1 quart minimum), sunscreen, insect repellent, long-sleeved shirt, and a wide-brimmed hat. It is suggested that you secure important belongings in a sealable plastic bag or plastic container. Participants 18 years of age and younger (pending program site), are welcome after completing a Release of Liability form by a parent or legal guardian. County regulations require that life vests to be worn by participants at all times. Customized tours can be arranged for groups of six or more by calling the Eco-tourism Office - (305) 365-3018.

FOSSILIZED REEF KAYAK TRIP

Friday, May 30, 2003

Saturday, March 29, April 5, & May 3, 17, 24, 2003

Sunday, March 23, 30, April 27, & May 11, 18, 2003

Time: 9:00A.M.-Noon

Saturday, May 24, 2003

Sunday, April 6 & 13, 2003

Monday, April 7, 14, 21 & 28, 2003

Wednesday, April 23, 2003

Time: 2:00P.M. – 5:00P.M.

Saturday, May 31, 2003

Sunday, May 4, 2003

Time: 2:30P.M. – 5:30P.M.

Sunday, May 11, 2003

Time: 3:00P.M. – 6:00P.M.

Fee: \$25.00/Person - Rental of snorkeling gear is available at an additional \$5.00 fee.

Rated: Easy to moderate - a great introduction to snorkeling for beginners. It consists of 1 3/4 miles of coastal kayaking and 45 minutes of shallow water snorkeling.

Kayak along the Key Biscayne shoreline exploring the abundant marine life that inhabits the sea grass beds. Then you will don your snorkeling gear and explore the fossilized mangrove reef formed 1500 years ago from black mangroves. **Reservations: (305) 365-3018. Meet at the Crandon Park Visitors’ and Nature Center.**

NEW! COCONUT GROVE AND HISTORIC MIAMI KAYAK TRIP

Sunday, April 20, May 11, & 25, 2003

Time: 8:00A.M. – 3:00P.M.

Fee: \$35.00/Person

Rated: Strenuous (Trip is six miles one way and requires 4 hours of paddling)

Kayak from the Rickenbacker Causeway past Vizcaya, the Barnacle State Historic Site to Matheson Hammock Park. This is a unique trip along Miami’s historic bay front where the history and abundant marine life of Biscayne Bay will be featured. There will be a lunch stop on one of the islands while enroute to Matheson Hammock Park. Participants must be 9 years or older and an adult must accompany persons under 18 years of age.

Special group tours are available for dates not listed. Group will meet at the Crandon Park Visitors’ and Nature Center and be shuttled back to Crandon Park after completing the trip. **For Reservations call: (305)365-3018.**

BIRD KEY KAYAK TRIP

SUNSET TRIP

Saturday, April 19, 2003

Time: 4:00P.M. - 6:00P.M.

Fee: \$20.00/Person

Rated: Easy to Moderate

This canoe trip to the Bird Key Rookery in Biscayne Bay will feature spectacular views of in-coming flights of wading birds and a variety of marine life. **Reservations: (305) 662-4124. Meet at Pelican Harbor Marina.**

NEW! PELICAN HARBOR ISLAND HOP

KAYAK TRIP

Saturday, April 12, 2003

Time: 9:00A.M. – 12:00P.M.

Fee: \$20.00/Person

Rated: Easy to Moderate

Kayak around a string of islands along the intra-coastal waterway in North Biscayne Bay. Observe birds, marine life and learn more about the restoration and history of these sites. **Reservations: (305) 662-4124. Meet at Pelican Harbor Marina.**

NEW! PELICAN HARBOR ISLAND KAYAK AND SNORKEL TRIP

Saturday, April 19, 2003

Time: 9:00A.M. – 1:00P.M.

Fee: \$25.00/Person.

Rated: Moderate

Kayak out to one of the North Biscayne Bay’s islands, then don your snorkel gear and dive in to get up close with the marine creatures that inhabit beneath the water surface. Snorkel over grass flats and discover how these islands were formed. **Reservations: (305) 662-4124. Meet at Pelican Harbor Marina.**



INTRODUCTION TO SNORKELING WORKSHOPS

CRANDON PARK AND PELICAN HARBOR MARINA

Snorkeling workshops for groups are available at Crandon Park and Pelican Harbor Marina upon request. Workshops are designed to offer participants instruction in the fundamentals of snorkeling which will include basic procedures, equipment use, skills, and safety techniques on open ocean waters. A minimum of 6 participants necessary. **Call (305) 365-3018 for more information to schedule your group.**

KAYAK AND CANOE RENTALS

KAYAKS AT CRANDON PARK VISITORS’ AND NATURE CENTER

4000 Crandon Boulevard, Key Biscayne

(305) 365-3018

Saturday and Sunday

Time: 10:00A.M. - 5:00P.M.

Rates: \$10.00/Hour or \$25.00/4 Hours

Rentals at North Beach Lifeguard Tower #4

CANOES AT GREYNOLDS PARK

17530 W. Dixie Highway, North Miami Beach

(305) 948-2891

Saturday and Sunday

Time: 10:00A.M. - 5:00P.M.

Rates: \$7.00/Adult, \$4.00/Child – Per Hour

Rentals at Greynolds Park Boathouse

CANOES AT BILL SADOWSKI PARK

AND NATURE CENTER’

17555 S.W. 79th Avenue, South Miami

(305) 255-4767

Saturday and Sunday

10:00A.M. – 5:00P.M.

Rates: \$7.00/Adult, \$4.00/Child – Per Hour

Special Group Rentals Available

Rentals at Nature Center

All participants must sign Rental Agreement. A Release of Liability form must be completed and signed by parent or guardian for participants of minority age (under 18 years of age) for all rentals.



Wilderness Adventure Van Trips

ABOUT OUR ECO-ADVENTURE VAN TOURS:

Pack your “Sense of Adventure” and come enjoy a fun-filled day of exploration where you have a chance to learn about and experience the places where you live with a new perspective. On these naturalist-guided Eco-Adventure van tours into some of the most unique and beautiful wilderness parks of southern Florida, you will have an opportunity to return to the old Florida charm. We take pride in minimizing impact on the environment while you encounter and unlock the magic of places like the Everglades, Big Cypress Swamp, and the Upper Florida Keys. For your comfort, you will be transported in our air-conditioned eco-vans. Unless otherwise stated, please bring lunch, beverage, sunscreen, insect repellent, a long sleeved shirt, good walking shoes or boots, and a hat. Snacks and beverages will be provided on your journey as well as field guides and spotting scopes to help enhance your outdoor experience. Fees include transportation and interpretive guide. Call (305) 365-3018 or (305) 365-3019 for more information and reservations.

RIVER OF GRASS ECO-ADVENTURE TOUR

Friday, April 4, 2003

8:30A.M. – 3:00P.M.

Fee: \$40.00/Adult, \$20.00/Child (under 12 years)

“There are no other Everglades in the world,” wrote Marjory Stoneman Douglas in her classic 1947 book, “Everglades: River of Grass” published in the very year that President Harry S. Truman made Everglades National Park a national treasure. On this trip we will immerse you in Everglades history, beginning at the Ernest F. Coe Visitor Center for an overview of the park before traveling to Royal Palm Hammock for a walk along an elevated boardwalk called Anhinga Trail. Here you will see wild American alligators in their natural habitat along with countless other animals, including birds such as purple gallinules, herons, egrets, and the trademark anhinga. Lunch will be served at the Long Pine Key picnic area surrounded by pine rockland habitat. Your Everglades journey continues to the Pay-Hay-Okee Overlook

where you can enjoy a spectacular view of the sweeping sawgrass prairies that make the Everglades special. The tour ends with a stop at “Robert Is Here” fruit stand in Florida City, a place where the history is as rich as the tropical milk shakes. **Call (305) 365-3018 for more information and reservations.**

EAST EVERGLADES—BIG CYPRESS SWAMP ECO-ADVENTURE TOUR

Thursday, April 24, 2003

Saturday, March 29, 2003

Time: 8:00A.M. - 5:00P.M.

Fee: \$40.00/Adult, \$20.00/Child (under 12 years)

Neighboring the Everglades is a watery wilderness named Big Cypress National Preserve, not because the cypress trees are so big, but because the area encompasses over 700,000 acres. On this naturalist guided tour, you will first travel across the East Everglades on Tamiami Trail through the Miccosukee Indian Reservation. Along the way you will see an abundance of wildlife from alligators to zebra butterflies, and possibly the endangered Everglades Snail Kite. You will also learn of the human and natural history of the area before arriving at the Oasis Ranger Station for a rest stop and overview of the preserve. Next you will travel to Turner River Road for a leisurely drive and frequent stops to view and learn about the wildlife and wildflowers seen along the way. This road ends at Bear Island where you will enjoy a lunch break in the great outdoors. The tour ends with a brief stop along Tamiami Trail at noted photographer, Clyde Butcher’s Big Cypress Gallery, to enjoy his images of natural Florida. **Call (305) 365-3018 for more information and reservations.**

EVERGLADES BIRDING TOUR

Thursday, March 27 & Friday, April 11, 2003

Saturday, April 26, 2003

Time: 8:00A.M. - 4:00P.M.

Fee: \$40.00/Adult, \$20.00/Child (under 12 years)

Pack you binoculars and spend the day with a professional naturalist guide on this van trip into the northern Everglades region. Over 400 bird species inhabit this area, including some that are not found anywhere else in the United States such as

the endangered Everglades snail kite. This trip takes you to various habitats in the Big Cypress Preserve’s Loop Road area to look for native birds, warblers, hawks, and periodic stops to scan for wading bird activity along the way. Field resources and spotting scopes will be provided. This is a great opportunity for beginning birders to start their life list! **Call (305) 365-3018 for information and reservations.**

EVERGLADES SWAMP TROMP ECO-ADVENTURE TOUR

Friday, March 28, & April 25, 2003

Thursday, April 10, 2003

Saturday, April 5, & May 31, 2003

Time: 8:30A.M. – 3:00P.M.

Fee: \$40.00/Adults, \$20.00/Child (under 12 years)

Cool your feet on this watery hike through wet prairies, sloughs and cypress swamps in search of birds, wildflowers and adventure. This fun hike will explore the various Everglades habitats and the animals that call them home, from reptiles and amphibians to birds, mammals and colorful butterflies. To lessen the impact on the natural ecosystems, this walk is limited to 10 participants, so be sure to sign up early and bring your binoculars and a change of shoes. This tour is rated moderate for wading in watery conditions. **Call (305) 365-3018 for more information and reservations.**

FAKAHATCHEE STRAND BOTANICAL ECO-ADVENTURE TOUR

Thursday, April 3, 2003

Saturday, April 12, 2003

Time: 8:00A.M. – 5:00P.M.

Fee: \$40.00/Adult, \$20.00/Child (under 12 years)

This is wild Florida at its best. Leave your inhibitions behind and follow an informative guide into the heart of the Fakahatchee Strand Preserve in Collier County. In this daunting, but picturesque swamp, you will discover some of the rarest plants in Florida, including the Ghost Orchid, which made the best-selling book, “The Orchid Thief,” famous. Here too is where your footprint can mingle with those of the Florida panther, black bear and Everglades mink. Not only is this a place rich in flora and fauna, it also has an interesting history, and part of your tour you will walk along old, elevated logging roads created to harvest cypress trees in the 1940’s. Prepare

NatureCenter

PROGRAMS and DATES

ARCH CREEK PARK AND NATURE CENTER

1855 N.E. 135 Street
North Miami, Florida
Phone: (305) 944-6111

NATURE WALK

Saturday, April 5, 19, & May 3, 17, 2003
Time: 12:30P.M. - 2:00P.M.

Fee: Free

Walk in the footsteps of the extinct Tequesta Indians as you stroll through this historical and tropical hardwood hammock. Learn about the different plants, their uses and how they fit into this ecosystem. **For special group tours call: (305) 944-6111. Meet at the Nature Center/Museum.**

AN INTRODUCTION TO EDIBLE AND MEDICINAL NATIVE PLANTS

Saturday, April 5, 19, & May 3, 17, 2003
Time: 9:30A.M. - 11:30A.M.

Fee: \$3.00/Person

This tour through the Arch Creek hardwood hammock will focus on edible and medicinal plants that inhabit this area. Indulge in safely smelling and tasting and discover what makes our native plant life unique amongst others. **Reservations: (305) 944-6111. Meet at the Nature Center/Museum.**

BILL SADOWSKI PARK AND NATURE CENTER

17555 S.W. 79th Avenue
Miami, Florida
Phone: (305)255-4767

WEEKEND NATURE WALKS & TALKS

Saturdays & Sundays
Time: 3:00P.M. – 4:00P.M.

Fee: \$2.00/Person

Join a park naturalist every Saturday and Sunday for a variety of natural history topics on the nature trails ranging from native plants, snakes, turtles, to recycling. **Reservations: (305) 255-4767. Meet at the Nature Center.**

BAYNANZA CANAL CLEANUP BY CANOE

Saturday, April 12, 2002
Time: 9:00A.M. – 2:00P.M.

Fee: \$20.00/Adult, \$10.00/Child (under 18 years and accompanied by an adult)

Rated: Easy

Join park naturalists on an easy two-hour paddle to Coral Reef Park and back. Along the way enjoy observing turtles, iguanas, fish, and a variety of wading birds. As our contribution to the annual Baynanza bay clean up, we will gather some of the floating trash that endangers much of the sea life when the canal water is released into Biscayne Bay. You will need to bring water, shoes that you can get wet, hat, and sunscreen. **Meet at the nature center. Reservations: (305) 255-4767.**

MOTHER'S DAY SUNSET CANOE TRIP

Sunday, May 11, 2003
Time: 4:00P.M. – 7:00P.M.

Fee: \$20.00/Adult, \$ 10.00/Child (under 18 years and accompanied by an adult)

Rated: Easy

Join park naturalists with your moms for a leisurely sunset paddle on the C-100 canal bordering the park. We'll search for

wildlife, and then turn west in time to enjoy a beautiful sunset and watch flocks of White ibis returning to their roost. Please come prepared with a drink and shoes that you can get wet. **Meet at the Nature Center. Reservations: (305) 255-4767.**

COMING IN MAY 2003 – DEDICATION OF THE NEW FRESH WATER AQUARIUM EXHIBIT! – CALL (305) 255-4767 FOR MORE INFORMATION.

CASTELLOW HAMMOCK PARK AND NATURE CENTER

22301 S.W. 162nd Avenue
Homestead, Florida
Phone: (305) 242-7688

FLORIDA KEYS WILDFLOWERS SLIDE LECTURE

Saturday, April 5, 2003
Time: 9:00A.M. – 10:30A.M.

Fee: \$5.00/Person

Join naturalist/author Roger Hammer on this photo journey through the Florida Keys and learn about some of the interesting and colorful plants that inhabit these enchanting islands. This is a preview of his upcoming book, "Florida Keys Wildflowers." **Meet at the Nature Center. Pre-registration required: (305) 242-7688. *Learn more about Florida Keys Wildflowers on our Eco-adventure van tours to Key Largo scheduled for May 1, 3, 22, & June 7, 2003.**

HUMMINGBIRD AND BUTTERFLY GARDENING

Sunday, April 6, & 26, 2003
Time: 9:00A.M. – 11:00A.M.

Fee: \$15.00/Person

This popular class covers all aspects of gardening to help you create an oasis for hummingbirds and butterflies in your own yard. Flowering trees, shrubs, and vines that attract these winged jewels will be discussed. Fee includes an educational handout. **Meet at the Nature Center. Pre-registration required: (305) 242-7688.**

BACKCOUNTRY FISHING WORKSHOP

Sunday, April 13, 2003
Time: 9:00A.M. – 12:00P.M.

Fee: \$15.00/Person

Naturalist and avid fisherman Roger Hammer, is offering this popular workshop that will help sharpen your skills when fishing the shallow backcountry waters of South Florida for such popular fish as snook, redfish, tarpon, and sea trout. Fishing techniques, choosing the right bait and tackle, moon phases, understanding tides, fishing the right seasons, and other expert advice will be offered during this informative class. **Meet at the Nature Center. Re-registration is required: (305) 242-7688. B**

EASTER EVERGLADES WILDFLOWER WALK

Saturday, April 19, 2003
Time: 8:30A.M. – 11:30A.M.

Fee: \$15.00/Person plus Everglades National Park entrance fee (\$10 per car)

Join naturalist Roger Hammer, author of the recently released book, "Everglades Wildflowers", on this leisurely-paced walk on Long Pine Key in Everglades National Park. Wildflowers abound this time of the year in the prairies, pinelands, and hammocks of the Everglades. **Meet at the Ernest F. Coe Visitor Center.** Purchase your own copy of Everglades Wildflowers in the Visitor Center bookstore, have the author sign it, and bring it along on this informative walk. **Pre-registration required: (305) 242-7688.**

OWL WALK

Thursday, April 24, 2003
Time: 7:30P.M. – 8:30P.M.

Fee: \$5.00/Person

It's spooky out there, so bring your kids on this naturalist-guided, nighttime hike along Castellow Hammock's nature trail in search of Screech Owls, Ogre-faced Spiders, Nighthawks, and other creatures that come awake at night. Tape calls will be used to possibly lure in Screech Owls for viewing. Bring a flashlight. **Meet at the Nature Center. Re-registration required: (305) 242-7688.**

MOTHER'S DAY WILDFLOWER WALK

Saturday, May 10, 2003
Time: 8:30A.M. – 11:00A.M.

Fee: \$15.00/Person plus Everglades National Park entrance fee (\$10.00 per car)

Celebrate Mother's Day surrounded by nature on this leisurely-paced walk on Long Pine Key in Everglades National Park. Wildflowers abound this time of the year in the prairies, pinelands, and hammocks of the Everglades. **Meet at the Ernest F. Coe Visitor Center. Pre-registration is required: (305) 242-7688.**

EVERGLADES WILDFLOWERS SLIDE LECTURE

Thursday, May 15, 2003
Time: 7:00P.M. - 8:30P.M.

Fee: \$5.00/Person

Join naturalist Roger Hammer, author of the new book, "Everglades Wildflowers", for this informative slide presentation that features 80 species of common and rare wildflowers found in the Everglades region. This is a good way to learn about wildflowers or to give you a prelude to your Everglades visit. **Meet at the Nature Center. Pre-registration required: Call (305) 242-7688.**

FLOWERING NATIVE PLANTS OF THE FLORIDA KEYS SLIDE LECTURE

Wednesday, May 21, 2003
Time: 7:00P.M. – 8:30P.M.

Fee: \$5.00/Person

Enjoy the beauty of the native flowering trees, shrubs, vines, and herbaceous wildflowers during this informative slide presentation. Eighty species of the Florida Keys will be featured and will be a preview of an up-coming book, "Florida Keys Wildflowers". **Meet at the Nature Center. Pre-registration is required: (305) 242-7688.**

CRANDON PARK VISITORS' AND NATURE CENTER

6767 Crandon Boulevard
Key Biscayne, Florida
Phone (305) 361-6767, Ext. 112
Enter through North Beach Entrance
Parking Fee: \$4.00/Vehicle

The Crandon Park Visitors' and Nature Center is your gateway to the Bear Cut Preserve, a 265 acre portion of the natural barrier island located on the north tip of Key Biscayne. Visit the center's exhibit room and aquariums with different re-created underwater habitats. Also visit and experience the new boardwalk that travels along a coastal hammock to the spectacular view of Biscayne Bay at the beach overlook. Self-guided nature trails and guides are available. **The nature center and gift shop are open Monday through Friday, 10:00A.M. - 4:00P.M.**

PUBLIC NATURE WALKS

Naturalist guided hammock nature walks are conducted **every Saturday and Sunday at 10:00A.M. & 2:00P.M. Walks are FREE. Meet at the Crandon Park Visitors' and Nature Center. For additional information call: (305) 361-6767, Ext. 112.**

GREYNOLDS PARK

17530 W. Dixie Highway
North Miami Beach, Florida
Phone (305) 945-3425

BIRDS, BUTTERFLIES, & BINOCULARS

Saturdays, April 12, 19, May 10, & 24, 2003
Time: 10:00A.M. – 12:00P.M.

Fee: \$3.00/Person plus \$4.00 entrance parking fee

Explore Greynolds Park with binoculars in hand for migratory song birds, hawks, and butterfly "hotspots". Learn the basics in operating your binoculars for optimum wildlife viewing. **Meet at the Boathouse. For Group Reservations: (305) 948-2891.**

OWL PROWLS

Wednesdays, March 26, April 9, 23, May 14, & 28, 2003
Saturdays, April 12, 26, May 10, & 24, 2003

Time: 7:00P.M.

Fee: \$5.00/Person

Whoooo lingers in the woods at night? Screech Owls? Gray Fox? Or even Spotted Skunks? Join park naturalists on this walk on the trails of Greynolds Park after sunset for a unique show of creatures that inhabit the park at night. **Meet at the Boathouse. For more information and reservations: (305) 948-2891.**



for rugged adventure on this Eco-Adventure! **Call (305) 365-3018 for more information and reservations.**

LOXAHATCHEE NATIONAL WILDLIFE REFUGE—

NORTH EVERGLADES ECO-ADVENTURE TOUR

Friday, April 18 & May 16, 2003
Sunday, April 27 & May 25, 2003

Time: 8:30A.M. – 5:00P.M.

Fee: \$40.00/Adult, \$20.00/Child (under 12 years)

Spend a day exploring the vast northern Everglades habitats of the Arthur R. Marshall Loxahatchee National Wildlife Refuge consisting of sloughs, wet prairies, sawgrass, and tree islands. Walk along a boardwalk into the Cypress forest that lies along the eastern edge of the Everglades. Spot wading birds, hawks, alligators and wintering waterfowl along the marsh trail. This adventure offers a comparative to the southern Everglades habitats that are featured in our other Eco-Adventures trips. **Call Greynolds Park for more information and reservations: (305) 948-2891 and (305) 945-3425.**

DISCOVER THE FLORIDA KEYS

KEY LARGO ECO-ADVENTURE TOUR

Thursday, May 1 & 22, 2003
Saturday, May 3, & June 7, 2003

Fee: \$40.00/Adult, \$20.00/Child (under 12 years)

Plus: Coral Reef Tour on Glass Bottom Boat: \$18.00/Adult, \$10.00/Child (under 12 years)

Pack your sense of adventure and join our naturalist guides on this van trip across Card Sound Road to the Upper Florida Keys. After enjoying a stunning view of Biscayne Bay and Card Sound as we cross the Card Sound Bridge, the first stop will be at Crocodile Lake National Wildlife Refuge for an educational overview of the endangered American crocodile that inhabits South Florida. Next, you walk the trails of Key Largo Hammocks State Botanical Site with your naturalist guide and learn about how this area was saved from development in the 1980's. This is also a good area to watch for white-crowned pigeons, mangrove cuckoos, black-whiskered vireos and other local birds that inhabit the Florida Keys. Our lunch stop will be at John Pennekamp Coral Reef State Park where you will also enjoy a scenic tour of the shallow coral reefs on a glass-bottom boat. Over 50 species of coral and hundreds of colorful tropical fish inhabit the waters in this remarkable park. **Call (305) 365-3018 for more information and reservations.**

WINDLEY KEY & LONG KEY STATE PARKS ECO-ADVENTURE TOUR

Thursday, May 8, & June 5, 2003

Saturday, May 17, & June 21, 2003

Time: 8:00A.M. - 5:00P.M.

Fee: \$40.00/Person, \$20.00/Child (12 years and older)

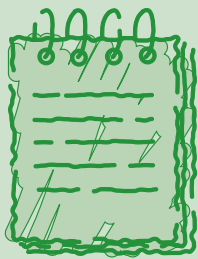
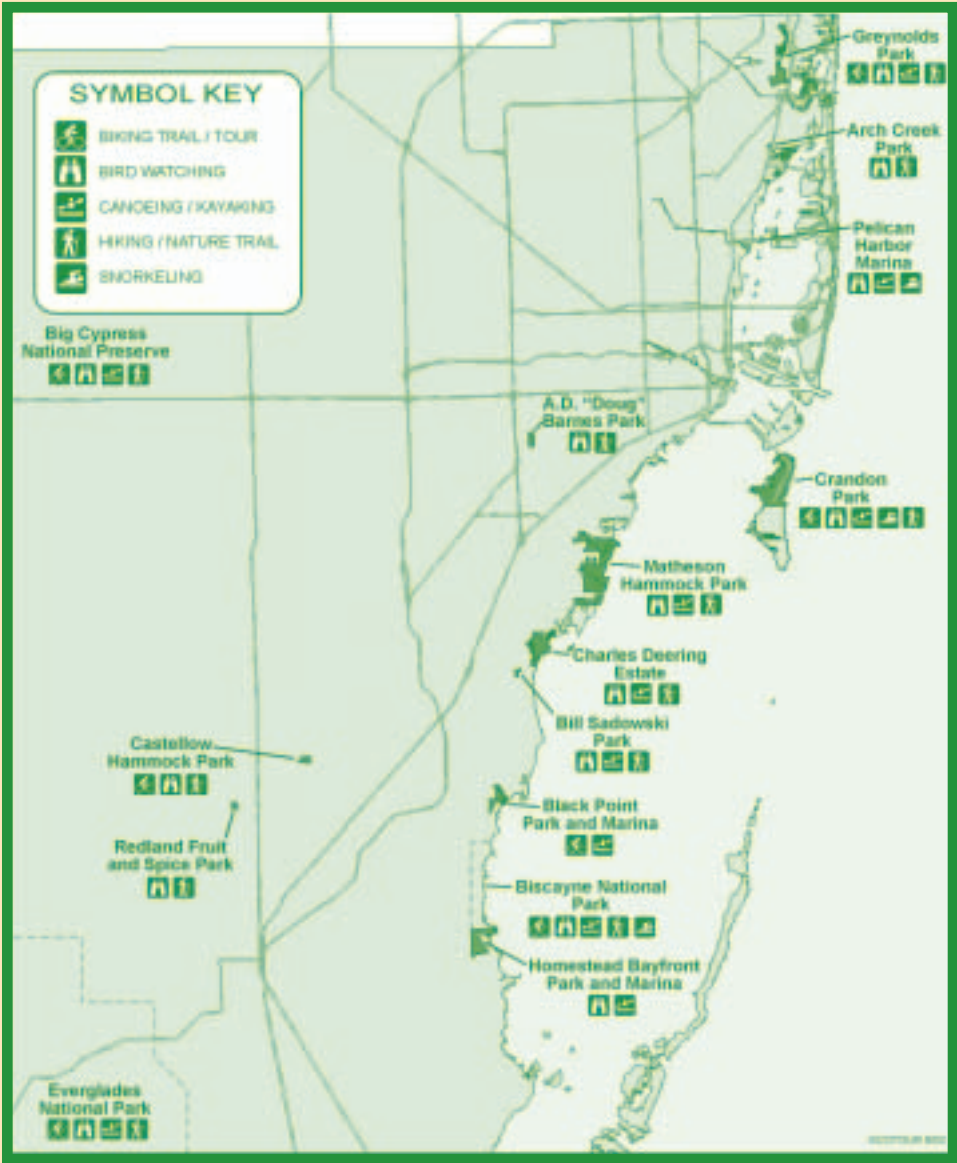
The relaxed lifestyle enjoyed by visitors and residents of the Florida Keys today belies the harsh struggle endured by settlers of the area just a century ago. Join us on this informative, historical tour of the Upper and Middle Keys. The first stop will take you to an historic limestone quarry in Windley Key Fossil Reef State Geological Site. This is where limestone was quarried for Henry Flagler's railroad from Miami to Key West in the early 1900's, only to be destroyed in the hurricane of 1935. Here you will walk through a forest of tropical hardwood trees, many of which are found nowhere else in the United States. Next, get a taste of local flavor with a fresh grouper sandwich at Robbie's Marina and then feed the wild 100+ pound Tarpon that frequent the marina before heading off to get your own feet wet at Long Key State Park. Here you will have the opportunity to see and learn about the abundant life found in the shallow sea grass beds surrounding this beautiful park. If natural and cultural history is what you like, then this tour is for you! Bring an extra pair of closed toe shoes (tennis preferred) for wading in the water. **Call (305) 365-3018 for more information and reservations.**

Groups

ECOADVENTURES OFFERS CUSTOMIZED PRIVATE AND GROUP TOURS

For those who like to explore nature and its unique ecosystems, let us help you design your very own naturalist-guided, EcoAdventure Tour of the Miami-Dade County's resource-based parks, Everglades or Florida Keys! Tell us what your group wants to do and see, and we'll design a special tour for you. We can accommodate groups from six and up, including bus tours. Special arrangements can be made for box lunches and dinner at local restaurants. Special bike tours, airboat rides, wildlife presentations, and slide shows are available upon request. For more information call the Eco-Tourism Office at (305) 365-3018, or 365-3019, Monday through Friday, 9:00A.M. - 5:00P.M.

Miami-Dade County Park and Recreation Department
Eco-Tourism Program Sites



Naturalists Notebook
Spring Happenings

The spring season in South Florida signals that the less humid and cooler days are coming to an end, and the warm, steamy days of summer are not far away. It also means that the rainy season will soon start up in late May or early June, a time when the Everglades will start its transition into the wet season. The first heavy rains of this annual cycle encourage new green sprouts of the saw grass and the dry prairies and sloughs start to fill up with water and become active with a sudden, explosive growth of algae, plankton, crayfish, snails, and fish. Wading birds start to spread out across the Everglades landscape seeking new feeding areas, while love struck male bull alligators are bellowing loudly for the attention of a female. Actually, spring is the time for an all-out breeding of wildlife and the blooming of tropical trees, shrubs, and wildflowers in the parks. Our limited space can only alert you to a few of these rituals, but we hope it's enough to get you out watching wildlife and exploring park trails:

- Spring bird migration peaks in mid-April and is one of the most exciting times of the year for birders, both beginners and seasoned veterans. Visit the Miami-Dade County parks birding “hot Spots” to search for shorebirds, wading birds, songbirds, and hawks. Best birding parks are Bill Sadowski Park, Castellow Hammock, Crandon Park, Deering Estate at Cutler, A. D. Barnes Park, Greynolds Park, and Matheson Hammock.
- The male cones of the Slash Pine (*Pinus elliotti*) are releasing copious amounts of yellow pollen and are coating the paved trails at A.D. Barnes Park. Not to be outdone, first and second year female cones dot the treetops. The second year cones release seed in the air, while the first year ovulate cones catch the pollen released by the male cones, to begin the process of developing new seed cones. Did you catch all of this?
- Golden Orb silk spiders are hatching and the young go ballooning on spring breezes to establish new homes.
- Most Florida snakes begin mating rituals.
- May starts the height of crocodile nesting in the Upper Florida Keys.
- The sweet perfume fragrance of the Krug’s holly, sable palm, saw palmetto, and wild coffee flowers are filling the air attracting a variety of insect pollinators!
- Shy grey fox mothers are denning and raising their kits. They are frequently sighted at Bill Sadowski Park crossing the grounds at dawn and dusk or early afternoon.
- Live Oak trees are bursting into flower in Greynolds, A.D. Barnes, Matheson Hammock, and Castellow Hammock Parks providing a feeding feast for hummingbirds and spring migratory warblers.
- Marsh pink wildflowers along with Grass pink and Pine pink orchids are dotting the Everglades prairie landscape.
- Another spring bloomer is *Toxicodendron radicans*, or more commonly known as Poison Ivy, produces a small green flower that can be observed protruding from the stem. You might need to get close to actually see the tiny flower, but don’t get too close!
- Loves struck Carolina anole lizards are proudly displaying their bright red throat fan in hopes of captivating the interests of a female. This strategy is also accompanied by head bobs or push ups to defend its territory against other males.
- Sea turtle nesting season starts in late April or early May on Haulover and Crandon Park beaches. Lights out!



FACILITY

FEATURES

	Admission/Parking Fee	Picnic Shelters	Picnic Tables	Jogging/Walking Trails	Bike Trail	Fishing	Kayak/Snorkeling	Nature Photography	Nature Trail	Nature / Visitor Center	Museum	Ocean Walk	Swimming Beach	Canoe Rentals	Camp Grounds	Bird Watching Site	Guided Tours	Farm Site	Rest Rooms
A.D. Barnes Park & Nature Center 3401 SW 72 Avenue, Miami (305) 666-5883 / (305) 662-4124		☞	☞	☞	☞			☞	☞	☞					☞	☞	☞		☞
Amelia Earhart Park 401 East 65 Street, Hialeah (305) 685-8389	☞	☞	☞	☞	☞	☞		☞										☞	☞
Arch Creek Park & Nature Center 1855 NE 135 Street, North Miami (305) 944-6111		☞	☞	☞				☞	☞	☞	☞					☞	☞		☞
Castellow Hammock Park & Nature Center 22301 SW 162 Avenue, Homestead (305) 242-7688		☞	☞	☞				☞	☞	☞						☞	☞		☞
Crandon Visitors’ and Nature Center 4000 Crandon Blvd., Key Biscayne (305) 361-6767 ext. 112	☞		☞		☞			☞	☞	☞		☞	☞			☞	☞		☞
Crandon Park and Crandon Adventures 4000 Crandon Blvd., Key Biscayne (305) 361-5421 / (305) 365-3018		☞	☞	☞	☞	☞	☞	☞	☞	☞		☞	☞	☞		☞	☞		☞
Deering Estate at Cutler 16701 SW 72 Avenue, Miami (305) 235-1668	☞		☞					☞	☞	☞						☞	☞		☞
Greynolds Park 17530 W. Dixie Highway, North Miami Beach (305) 945-3425	☞	☞	☞	☞	☞			☞	☞					☞	☞	☞	☞		☞
Haulover Park 10800 Collins Avenue, North Miami Beach (305) 947-3525			☞	☞	☞	☞	☞	☞				☞	☞			☞			☞
Kendall Indian Hammocks Park 11345 SW 79 Street, Miami (305) 596-9324		☞	☞	☞	☞			☞	☞							☞			☞
Larry and Penny Thompson Park 12451 SW 184 Street, Miami (305) 232-1049		☞	☞	☞	☞	☞		☞	☞				☞		☞	☞	☞		☞
Pelican Harbor Marina 1275 NE 79th Street Causeway (305) 662-4124						☞	☞					☞				☞			☞
Matheson Hammock Park 9610 Old Cutler Road, Miami (305) 666-6979	☞	☞	☞	☞	☞			☞	☞			☞	☞			☞			☞
Bill Sadowski Park & Nature Center 17555 SW 79 Avenue, Miami (305) 255-4767			☞	☞	☞	☞		☞	☞	☞				☞	☞	☞	☞		☞
Preston B. Bird and M. Heinlein Fruit & Spice Park 24801 SW 187 Avenue, Homestead (305) 247-5727	☞							☞								☞	☞		☞
Miami Metrozoo 12400 SW 152 Street, Miami (305) 251-0400 / (305) 255-5551	☞	☞	☞		☞			☞		☞	☞					☞	☞		☞
Camp Owaissa Bauer 17001 SW 264 Street, Homestead (305) 247-6016 <i>Group Camp Facility—Reservation Only</i>																			



Eco-Adventure Tours Newsletter
Volume 6
March-April-May 2003
Published by the Miami-Dade County Park and Recreation Department.
Vivian Donnell-Rodriguez
Director
Jim King
Editor and Interpretive Naturalist Coordinator

Send questions or comments to:
Eco-Tourism Crandon Park
4000 Crandon Blvd.
Key Biscayne, FL 33149
Phone (305) 365-3018
E-mail: ecoadventures@miamidade.gov
E-mail: cranature@miamidade.gov
Website: www.miamidade.gov/parks

DEPARTMENT SENIOR NATURALIST STAFF

Sally Timberlake
Eco-Tourism

Robert Carmona
A.D. Barnes Park/Pelican Harbor Marina/ Matheson Hammock Park

Karen Solms
Arch Creek Park/Greynolds Park

Barbara Gouldener
Bill Sadowski Park

Ernest Lynk
Crandon Park

Roger Hammer
Castellow Hammock Park

Eduardo Salcedo
Deering Estate at Cutler

Joe Maguire
Natural Areas Management

Chris Rollins
Preston B. Bird & Mary Heinlein Fruit and Spice Park

ALEX PENELAS
Mayor

BOARD OF COUNTY COMMISSIONERS

BETTY T. FERGUSON District 1	KATY SORENSON District 8
DORRIN D. ROLLE District 2	DENNIS C. MOSS District 9
DR. BARBARA CAREY-SHULER District 3	SEN. JAVIER D. SOUTO District 10
SALLY A. HEYMAN District 4	JOE A. MARTINEZ District 11
BRUNO A. BARREIRO District 5	JOSE “PEPE” DIAZ District 12
REBECA SOSA District 6	NATACHA SEIJAS District 13
JIMMY L. MORALES District 7	

STEVE SHIVER
County Manager

ROBERT A. GINSBURG
County Attorney

Miami-Dade Parks provides recreational experiences for persons with disabilities. Call (305) 755-7848 (V/TDD) to request materials in accessible format and a sign language interpreter (request 7 days in advance).

122.01-63 3/03



Eco-Adventures
Crandon Park
4000 Crandon Blvd.
Key Biscayne, FL 33149

PPSRT STD
U.S. Postage
PAID
Miami, FL
Permit #1087

RETURN SERVICE REQUESTED

Nature Watch

Everglades (Snail) Kite

by Jim King

When it comes to picky eaters, no other bird in North America is as finicky as the Snail Kite (*Rostrhamus sociabilis*). If birds are what they eat, then Snail Kites are really apple snails (*Pomacea paludosa*) since apple snails make up a very large part of their diet. This is not by chance but by special design that relates to many aspects of the kite's biology. Take for example, the Snail Kite's long sharply curved bill. Nature has designed a special tool that is just the right shape for this bird to extract the slimy snail from its shell without much difficulty. What is amazing is how the kite can do this without breaking the shell. Actually the kite is very patient. After plucking a snail from the water, the kite flies to its favorite perch, stands motionless for several seconds on one leg, holding the snail in the long talons of the other foot. Soon the snail, which had withdrawn tightly into its shell, begins to slowly come out its shell. Suddenly and without hesitation the kite grasps the body of the snail where it is plucked and swallowed hole. A Snail Kite perch can often be recognized by the pile of up to two hundred or more discarded shells found at the base of it. The Snail Kite also has long legs and each foot has four toes with long, curving claws called talons that are well suited for reaching down into the water to snatch snails. The long talons are well adapted to grasp the smooth rounded shell of the snail.

The bird prefers open fresh water marshes where the vegetation is not too tall or dense, making it difficult for the bird to see its prey. Emergent vegetation, such as spike rush and pickerelweed interspersed with saw grass or cattails, enable apple snails to climb near the surface of the water to feed on algae or lay eggs on the stem.

To watch a Snail Kite hunt is a remarkable study of determination. They like to hunt early in the morning or later in the afternoon when apple snails are the most active and close to the surface of the water. When hunting snails, the kite flies slowly back and forth in a leisurely fashion over the open marsh grass with its head inclined downward, and keeping within six to twenty feet in the air. Their wing beats appear "labored", expanding and twisting the tail like a rudder at the same time. Upon spotting a snail, the kite may swoop down, or "hovers" above the water's surface and then dips down and extends its feet to grasp the snail.

On several occasions, I have observed Snail Kites actually extend one leg with open talons a few inches into the water and methodically remove an unsuspecting snail from the marsh vegetation. It never captures the snail with its bill, nor does it plunge in the manner of other fish-eating raptors like the Osprey. After picking off a snail, the kite transports its meal to a nearby feeding perch. Sometimes one or more other kites will chase it as it carries its prey. During periods of drought conditions in the Everglades and other fresh water marsh habitats, apple snails will bury themselves into the mud and become dormant until favorable water levels return. At this time, Snail Kites simply move on to a more suitable habitat where food is available.

The Snail Kite is an impressive medium-sized bird of prey about 14-16 inches long with a wingspan of 43-46 inches in length. The bird can be easily recognized in flight by its broad wings which are typical of many of the soaring hawks, and a square-tipped dark tail showing much white at its base. The male is a handsome bird with its entirely slate gray body, long orange-red legs and red at the base of the bill. Females have brown upperparts with various amounts of white streaking on the head, throat and breast. Young birds are similar to adult females but with more buff-colored streaking instead of the pure white of female kites. The legs and bill of female and juvenile kites are yellow to orange. Like the male, they show considerable white at the base of the tail which is especially noticeable while the bird is in flight. Both the male and female adult birds have red eyes while juveniles have brown eyes. Many resources describe the temperament of the Snail Kite as "docile"

even to the point of allowing other birds to share the same roost. It is not unusual to see fifteen to twenty birds gather in the same branches of a willow or pond apple tree to rest or preen at any time of the day. I have gotten as close as twenty feet to an adult female kite perched in a willow shrub escaping the heat of the passing day. Often these birds can also be observed soaring high on the rising thermals over the marshes with vultures and other hawks on a warm summer afternoon.

Breeding season for the Snail Kite tends to vary, most often starting in late January or February and lasting through early June or as late as into November. During courtship, the birds fly around at considerable height and repeatedly fold their wings and plunge down in short dips much like a Kingfisher would do when diving for food. The birds also dart at each other, one turning on its side and then grapple at each other with their talons. During these performances, they make a bleating cry that sounds like sheep.

Snail kites prefer to build shallow, fragile woody nests about a foot in diameter and consisting of loose sticks lined with dry saw grass or leaves from other marsh plants. The pair jointly work together to build their nest which may be placed in scrubs consisting of willows, wax myrtles, and Sweet bay. Or in bulrush and cattail communities usually three to eight feet above the water, although some may even nest in pond or bald cypress trees. Nests constructed on bulrush or cattails often collapse into the water for lack of structural support which has contributed to their high ratio of nest failures. Snail Kites are very gregarious and nest in colonies that consist of up to twelve or more pairs. The female will lay two to four off-white eggs covered profusely with brown blotched markings. Both the male and female kite will incubate the eggs and assist each other in the care of the young. While the female is busy tending to the nest or caring for the young, the male brings her snails for food. The young kites are well cared for by the parents and grow rapidly, usually leaving their nests in less than one month.

Anyone who has studied and spent much time looking for Snail Kites knows they do not stay in the same place for a great length of time. In fact, recent research surveys utilizing radio telemetry of Snail Kite populations indicate the kites are highly nomadic throughout their natural range consisting of the Kissimmee River Valley, southwest corner of Lake Okeechobee, the fresh water wetlands of the Loxahatchee National Wildlife Refuge, and the Florida Everglades. Apparently this behavior is in response to the condition of the water levels in the Snail Kite's habitat which in turn relates directly to the availability of its food supply – the apple snail. In areas of apple snail abundance, these birds are likely to stay put for several years until the snail population declines forcing the kite to move to other wetlands where food conditions are favorable.

Ongoing efforts to maintain water levels and apple snail populations appear to have helped to stabilize the Everglades Snail Kite, and there is evidence that its population is on the increase where the count currently exceeds 1000 kites. Fortunately for the Snail Kite, it adapts well to changing conditions as long as there are wetlands available to them. And that is the key to the survival of the Snail Kite and other wildlife that share its habitat.

We need to concentrate on the protection and restoration of the whole Everglades system that is made up of a network of habitats that include primary nesting habitats, feeding areas, and sites that provide refuge from other areas impacted by drought. We are learning, and in some cases it may be too late, that the protection of fragmented habitats is not enough for the survival of species. The highly specialized Snail Kite has taught us that much.

WHERE TO LOOK FOR THE SNAIL KITE

Snail kites can be observed in small concentrations in the South Florida Water Management's conservation areas and the Loxahatchee National Refuge's fresh water ponds at the headquarters' entrance. A reliable place to observe Snail Kites, especially during the winter months, is on the south edge of Conservation 3A located near the Shark Valley entrance to Everglades National Park and west of the Miccosukee Indian Restaurant on Tamiami Trail. Normally the wetlands in this area are kept open by the airboat routes that tend to result in favorable apple snail reproduction. Another site for kite observation is on Lake Kissimmee where State Road 60 crosses the southern outlet of the lake. A reliable way to observe Snail Kites is to join us on one of our East Everglades – Big Cypress Swamp van trips that are featured in this newsletter.

Illustration: Christopher Pfloto

NATURAL AREAS MANAGEMENT

VOLUNTEER WORK DAY CALENDAR

ADOPT-A-NATURAL AREA

Natural areas are the hammocks, pinelands, wetlands, mangrove forests, and seashores that once covered all of Miami-Dade County, but now remain only in undeveloped, protected areas. These habitats, and the plants and animals that live there, are all part of Miami-Dade County's natural heritage, and a resource to be treasured for generations to come. Non-native plants, introduced from around the world, have invaded these unique natural areas crowding out rare native plant species, seriously disrupting important natural processes such as storm recovery, and natural fire cycles. The control of non-native plants is considered one of the most important elements in the management of all natural habitats. The Department's Natural Areas Management (NAM) Volunteer Program gives you the opportunity to assist in the restoration of one of Miami-Dade County's natural areas by removing exotic plants, planting seedlings, or picking up trash.

Volunteers are taught to identify various invading non-native plants while gaining a greater understanding of these ecosystems. Other opportunities include historical research, fund raising and general office work. **Please call (305) 257-0933 - Extension 225, for directions and maps for these and other natural area sites scheduled for Volunteer Work Days.**

Natural Areas Sites & Volunteer Dates

**Saturday, April 12, & May 3, 2003 – Spudbusters Workdays
Kendall Indian Hammocks
11345 SW 79th street
Phone: (305) 596-9324**

All scheduled workdays begin at 9:00 A.M. and end at Noon. Come prepared to work outdoors. For your safety, closed-toe shoes are required and long pants are strongly recommended. All participants are required to complete a release form prior to participation. Volunteers under the age of 18 must have the form signed by a parent or guardian. **Groups should pre-register by calling (305) 257-0933.**

GENERAL INFORMATION

ABOUT ECO-ADVENTURES

Miami-Dade Park and Recreation Department offers a variety of Eco-Adventure Tours designed to introduce residents and visitors to some South Florida's most pristine parks and historic sites. Participants will discover the beauty and diversity of the subtropical paradise on canoe trips, bike trips, kayaking trips, snorkeling trips, marine wading tours, wildlife encounters, bird watching, and wilderness van tours into some of the best remote wilderness areas of the Everglades, Big Cypress National Preserve, Florida Keys, and local coastal parks. Our naturalist guides are well trained in safety and outdoor skills and have a thorough knowledge of South Florida's natural history. The naturalist-guided tours provide the opportunity to learn historic facts, see native wildlife, study new tropical plants and wildflowers, be mentally refreshed and physically refreshed, and enjoy other great experiences. Eco-Adventures is committed to the principles of "Leave No Trace," teaching and practicing ways of reducing visitor impact on natural areas and enhance the visitor's experience of the environment.

RESERVATIONS & REGISTRATION INFORMATION

To make reservations for the tours listed, please contact the Eco-Tourism Office at (305) 365-3018 or 365-3019, Monday through Friday, 9:00A.M. - 5:00P.M. Some tour reservations can also be made directly by calling the nature center that is offering the activity (see tour listings). Tours are limited to small groups and reservations must be made in advance. Reservations are confirmed and guaranteed after payment is received. Credit Cards (MasterCard, Visa, or American Express) are accepted by phone. Standbys will be called to fill spaces where payment has not been made one week prior to the event. Please make checks or money orders payable to: MIAMI-DADE COUNTY. Tours may be cancelled if the minimum number of reservations (Total 6) is not met two days prior to the actual date.